

UNITED STATES PUBLIC HEALTH SERVICE

Washington, August 14, 1916.

Congress has recently made an appropriation for 33 additional Assistant Surgeons in the United States Public Health Service. These officers are commissioned by the President, and confirmed by the Senate. The tenure of office is permanent, and successful candidates will immediately receive their commissions.

After four years' service, assistant surgeons are entitled to examination for promotion to the grade of passed assistant surgeon. Passed assistant surgeons after twelve years' service are entitled to examination for promotion to the grade of Surgeon.

Assistant Surgeons receive \$2000, passed assistant surgeons \$2400, surgeons \$3000, senior surgeons \$3500, and assistant surgeon-general \$4000 a year. When quarters are not provided, commutation at the rate of \$30, \$40, and \$50 a month, according to the grade, is allowed.

All grades receive longevity pay, 10 per cent. in addition to the regular salary for every five years up to 40 per cent. after twenty years' service.

Examinations will be held every month or so in various cities, for the convenience of candidates taking the examination. Further information will be furnished by addressing the Surgeon-General, United States Public Health Service, Washington, D. C.

THE ORGANIZATION OF THE ARMY.**Line and Staff, and the Administrative Zones in War.**

(By Major John W. Hanner, Medical Corps, U. S. Army.)

The army of the United States comprises the Regular Army, the Volunteer Army, the Officers' Reserve Corps, the Enlisted Reserve Corps, and the National Guard while in the service of the United States.

The land forces are grouped under two general heads:

1. The Mobile Army, organized primarily for offensive operations against an enemy.
2. The Coast Artillery, for defense of our ports and seacoast.

Another general grouping of the army may be made into:

1. The line, or combatant forces.
2. The staff corps and departments.

The line of the army consists of infantry, cavalry, field artillery, and coast artillery,—the first three organized in various regiments, the numbers determined by Congress in fixing the strength of the army. When three regiments of infantry, say, are combined under one command, it is called a brigade of infantry, and, typically, when three brigades are likewise combined, it makes a division, with the addition of cavalry, light artillery, engineers, signal troops, etc. Field armies are formed when two or more infantry divisions are combined.

The Staff Corps and Departments are the following: The General Staff Corps, the Adjutant General's Department, the Inspector General's Department, the Judge-Advocate General's Department, the Quartermaster Corps, the Medical Department, the Corps of Engineers, the Ordnance Department and the Signal Corps.

The Medical Department is made up of the Medical Corps, the Medical Officers of the Officers' Reserve Corps, the Dental Corps, the Veterinary Corps, an enlisted force, the Nurse Corps and Contract Surgeons. Its duties are many and varied: it looks after the sanitation of the army in the field, in camp and at permanent posts;—the water supply and its purification are its care, and the disposal of wastes; it cares for the sick and wounded; physically examines officers and enlisted men; manages and controls military hospitals; recruits and instructs its enlisted personnel; has control of the Nurse Corps, and furnishes all medical and hospital supplies.

"Administrative Zones" in War.

Under this head are embraced (1) the service of the interior, and (2) the service of the theater of operations, and this latter is again divided into (a) the zone of the line of communications, and (b) the zone of the advance.

In the interior we have the general depots of supply, general hospitals, arsenals, mobilization and concentration camps, etc.

In the theater of operations, the zone of the line of communications is the connecting link between the interior and the zone of the advance, forwarding supplies of men and material to the combatant forces from the interior, and conveying back from the advance the sick and wounded, and generally unfit, so as to leave the combatant forces unencumbered and mobile. In this area the sanitary service establishes evacuation and base hospitals, convalescent and isolation camps, and rest stations; has its base and medical supply depots, and has charge of hospital trains and hospital ships.

The zone of the advance is that area in which there is actual and potential fighting. In this area the sanitary service must be as mobile as the combatant troops, and is composed of camp infirmaries, ambulance companies and field hospitals.

ABSTRACT.**The Sanitary Service of the Premobilization Period.**

(By Major Ralph G. Devoe, Medical Corps, U. S. Army.)

The physical examination of recruits is one of the most important duties of medical officers. Many applicants with minor defects must be taken but it must be borne in mind that such are prone to take advantage of their defects to avoid difficult service. Medical officers are held personally responsible for the enlistment of unfit men and all defects must be noted, though not considered sufficient to demand the rejection of applicant.

In determining whether all body functions are sufficiently vigorous to withstand hardships of active service, special difficulties arise. Those most frequently met with are abnormalities of the special senses, diseases of the heart and lungs (tuberculosis), questions of mental stability, defective teeth, venereal disease and abnormalities of the extremities, especially feet.

Records and special identification procedures must be carried out under supervision of the medical officer, for the correctness of which he is responsible.

Laboratory methods must be employed when necessary to establish fitness or unfitness for service and the Wassermann test must be made routinely on all recruits and men re-enlisting. Specific prophylaxis especially that of smallpox and typhoid must be employed as a routine matter. The various communicable diseases commonly met with in the army in the premobilization period must be met by the means usually available for their diagnosis, isolation and the detection of carriers.

Solution of the problems of water and milk supply during the premobilization period, as compared with the magnitude and difficulty they assume in the field service, presents, ordinarily, little difficulty.

ABSTRACT.**The Diseases of War: Their Prevention, Control and Treatment.**

(By Major Lloyd L. Smith, Medical Corps, U. S. Army.)

Typhoid fever caused nine-tenths of all deaths among troops encamped in the United States in 1898. Factors determining the high rate of sickness in war have reference either to lowered bodily resistance or to increased facilities for infection. The reasons for increased facilities for

infection are concerned with water supply, disposal of excreta, overcrowding of tents, absence of suitable means of isolation and disinfection, and insanitary conditions of an unavoidable nature due to stress of war. Typhoid fever illustrates the infectious diseases of the intestinal type. In past wars typhoid fever has broken out toward the end of the first month in spite of all precautions. The finding of the typhoid carrier has dispelled much of the haze surrounding the mode of infection. Probably many of the organisms at the beginning of the outbreak were of low virulence, but increased in virulency on being transmitted through various individuals; men with lowered resistance supplied the early sporadic cases; outbreak assumed proportions of an epidemic after the necessary interval required for development of secondary infections. Ambulatory typhoid and premonitory diarrhea are of great importance. Early cases may have shown only diarrhea; these cases were less likely to show subsequent attacks of clinically typhoid fever. All this shows that diarrhea, in war times, deserves especial consideration and study. Infectivity of dust is short lived but intense while it lasts.

Mortality in cerebro-spinal meningitis is high and 40 per cent. of all contacts are said to be carriers.

Typhus fever of Mexico (tabardillo) and Brill's disease are identical with typhus fever. Immediate associations of this disease are famine, filth and vermin.

Scurvy is a deficiency disease that occurs in besieged forts. Gingivitis, caused by eating hard rations, is often mistaken for a symptom of scurvy.

Measures dealing with diseases in war are as complex and varied as the diseases with which they are designed to deal. Two essential methods are necessary: First, accurate diagnosis on direct clinical observation, provided no laboratory is at hand to give assistance; traveling motor laboratories for each army at the front is of great assistance; also, field laboratories on lines of communications; second, accurate statistical records of prevalence of those diseases which require remedial action.

Preventive measures: antityphoid inoculation absolutely essential; taking temperature of newly raised soldiers necessary before antityphoid inoculation to rule out cases already in the prodromal stage of typhoid fever. Typhus fever is prevented by attention to overcrowding, house sanitation, personal hygiene, proper bathing facilities, methods of destruction of vermin, disinfection of clothing, etc.

Remedial action: Prompt detection of wastage in the fighting strength and removal of its cause, whatever that may be. Here, statistical returns are of importance.

An Abstract of a Lecture on Medical Supplies and Equipment.

(By Colonel Henry I. Raymond, Medical Corps, U. S. Army.)

The Manual for the Army Medical Department, 1916, is divided into three parts. Part I treats of general medical administration; Part II treats of the sanitary service in war and Part III is upon the Supply Tables. The three grand subdivisions of supply are Post, Dental and Field.

Post supplies appear under the following subdivisions: (a) Medicines, antiseptics and disinfectants, (b) stationery, (c) miscellaneous, (d) laboratory supplies, (e) identification supplies and (f) X-ray supplies. In addition to the foregoing supplies the post or regimental surgeon must keep on hand certain field supplies in time of peace for the exigency of war. These are: (a) first aid packets for every officer and enlisted man of the command, (b) individual equipment, medical of-

ficer, (c) individual equipment, Hospital Corps, (d) regimental combat equipment, (e) camp infirmery equipment, (f) "additional articles" which when added to the camp infirmery will permit of the establishment of a regimental hospital.

Dental supplies are carried under two headings: (a) base, suitable for service in a general hospital, (b) portable outfit for itinerant service.

Field supplies embrace all those for field sanitary units, such as field hospitals and ambulance companies, and are replenished by issues from the base and advance medical supply depots. The advance depot makes issues chiefly to the fighting forces in the zone of the advance. This depot must keep in stock at all times at least one "medical reserve unit," which is a collection of medical supplies estimated to be sufficient to meet the immediate requirements of a reserve for one infantry regiment. A medical reserve unit as issued from a supply depot is contained in some 255 packages weighing about 18,000 pounds. The supplies and equipment of an Evacuation hospital are contained in 565 packages and weigh over 30 tons. This hospital located in the advance section of the line of communications is quite in contrast with the field hospital in the zone of the advance as regards mobility, for the field hospital supplies and equipment including tents are contained in 213 packages and weigh but 8 tons. Yet this seems excessive for a distinctly mobile field unit and the tendency is to trim it down. Only recently the beds and cots have been thrown out for hay and rubber blankets.

Certain equipment designations prescribed in general orders are as follows: Equipment "A" is that prescribed for use in campaign or on the march and is the only equipment for which transportation is provided. Equipment "B" is that which, in addition to equipment "A," is prescribed for more or less stationary troops, as in camps of mobilization, concentration, instruction or maneuver. Equipment "C," is the sum of equipment "A" and "B" and hence it includes every article prescribed for field service.

IN ERRATA.

On page 386 of the September Journal under New Members the name Bogue, H. E., should be H. Virgil Bogue.

NEW MEMBERS.

Flagg, Don P., Los Angeles.
Slater, John H., Los Angeles.
Smith, Bertrand, Los Angeles.
Stephens, J. M., Los Angeles.
Thomas, Benjamin, Palo Alto.
Clark, Ernest M., Oakland.
Forbes, Henry Stone, Berkeley.
Hieronymus, Arthur, Alameda.
Mehrmann, H. B., Oakland.
Rowe, Albert Holmes, Oakland.
Minaker, A. J., San Francisco.
Hewlett, A. W., San Francisco.
Herrington, Edward Lee, San Francisco.
Deimel, H. F., San Francisco.
Pietrafesa, Rocco, San Francisco.
Holzberg, Henry L., San Francisco.
Friedman, Aaron, San Francisco.

DEATHS.

Powers, Thomas, Los Angeles.
Makenson, Winfield S., Rio Vista.
McLaughlin, James H., Sutter Creek.
Cate, La Fayette, Adin.
Rosenberger, John Ashby, Del Rey.
Felt, Seth C., Los Angeles.
La Spada, Francesco, San Jose.